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An antenna built-in type mobile phone comprising:

a mobile phone main body; \and

a battery detachably attached to the mobile phone main body and having an antenna at a predetermined portion therein.

2. The mobile phone according to claim 1, wherein the battery comprising:

a battery cell in a predetermined form,

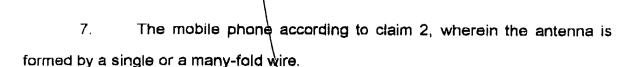
an antenna positioned at a predetermined portion within the battery cell,

a battery pack for holding the battery cell and the antenna.

- 3. The mobile phone according to claim 2, wherein a dielectric substance or a space exists between the antenna and the battery cell.
 - 4. The mobile phone according to claim 2, wherein the antenna is positioned at an upper portion of the battery cell.
 - 5. The mobile phone according to claim 2, wherein the antenna is positioned at a side portion of the battery cell.
- 6. The mobile phone according to claim 5, wherein the side portion of the battery cell is the outer side of the battery.

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8. The mobile phone according to claim 7, wherein the antenna is of a linear, a zigzag or an oval shape.

An antenna built-in type mobile phone comprising:

a mobile phone main body; and

a battery detachably attached to the mobile phone main body
of which the battery comprising:

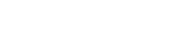
a battery cell;

an antenna positioned adjacent to the battery cell; and a battery pack for holding the battery cell and the antenna therein.

- 10. The mobile phone according to claim 9, wherein a dielectric substance or a space exists between the antenna and the battery cell.
- 11. The mobile phone according to claim 9, wherein the antenna is positioned at an upper portion or at a side portion of the battery cell.
- 12. The mobile phone according to claim 11, wherein the side portion of the battery cell is the outer side of the battery.
- 13. The mobile phone according to claim 9, wherein the antenna is formed by a single or a many-fold wire.

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4. A battery of a mobile phone comprising:

a battery cell;

an antenna electrically conhected with a mobile phone main body and implemented at a predetermined position adjacent to the battery cell; and

a battery pack holding the battery cell and the antenna therein

- 15. The battery according to claim 14, wherein a dielectric substance or a space exists between the antenna and the battery cell.
- 16. The battery according to claim 14, wherein the antenna is positioned at the upper portion of the battery cell.
- 17. The battery according to claim 14, wherein the antenna is positioned at the side portion of the battery cell.
- 18. The battery according to claim 17, wherein the side surface of the battery cell is the outer side surface of the battery.
- 19. The battery according to claim 14 wherein the antenna is formed by a single or a many-fold wire.
 - 20. The battery according to claim 14, wherein the antenna is of a linear or a zigzag shape.